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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,431	10/16/2003	Dale W. Schroeder	10030185-1	8035

7590 03/13/2007  
AGILENT TECHNOLOGIES, INC.  
Legal Department, DL 429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER
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LIANG, REGINA

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/687,431	<b>Applicant(s)</b> SCHROEDER ET AL.	
	<b>Examiner</b> Regina Liang	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/27/07.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/27/06 has been entered. Claims 21-49 are pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

3. Claims 21-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson (US 4,794,384).

As to claim 34, Figs. 1 and 2 of Jackson discloses a device for determining a first distance along a movement path on a surface (14) over which an optical tracking device (optical mouse 20) is moved by a user, comprising: a coherent light source (12) configured to project a first coherent light beam along the movement path and onto the surface (14) as an incident light beam; a plurality of light sensors (detector array 16) operatively associated with the coherent light source (12) and configured to sense at least a portion of the incident light beam reflected from the surface as a second reflected light beam, and a processor (control means, Figs. 3A, 3B), wherein the coherent light source is configured to generate a plurality of light interference

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speckles on the surface along the movement path as a result of the first light beam and the second light beam interfering with one another (col. 2, lines 38-44, col. 3, lines 6-12 for example), the plurality of light sensors (detector array) is configured to detect the pattern along the movement path, and the processor is configured to determine the first distance on the basis of the sensed pattern (col. 2, lines 44-52 for example).

As to claim 35, Jackson discloses means for determining a direction in which the optical mouse moves along the movement path on the basis of the sensed pattern (col. 2, lines 53-65).

As to claim 36, Jackson teaches comparing means (col. 2, lines 50-52).

As to claims 37, 38, Jackson teaches the detector detecting at least one characteristic of the speckles (col. 4, line 63 to col. 5, line 38).

As to claim 39, Fig. 2 of Jackson teaches the coherent light source and the sensors are configured such that dimensions corresponding to the interference pattern speckles as claimed.

As to claim 40, Jackson teaches the average speckle size is approximately given by the equation (col. 5, lines 1-17).

As to claims 42, 43, Jackson does not disclose the average speckle size is between 50-100 microns, or is approximately 10 microns. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Jackson to have the average speckle size as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

As to claim 41, Jackson teaches counting the number of speckles along the optical path to determine the first distance (Fig. 4 and col. 8, line 58 to col. 9, line 21).

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As to claims 44-48, Jackson teaches means for generating at least one of a high signal and a low signal in response to least one or some of the plurality of sensors detecting a speckle (col. 7, line 53 to col. 8, line 2 for example).

As to claim 49, Jackson teaches the device is a mouse.

Claims 21-33, which are method claims corresponding to the above apparatus claims, are rejected for the same reasons as stated above since such method "steps" are clearly read on by the corresponding "means".

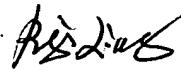
***Response to Arguments***

4. Applicant's arguments with respect to claims 21-49 have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Regina Liang  
Primary Examiner  
Art Unit 2674

3/3/07